

Application No.: 09/453,319

Docket No.: 209529-81571

REMARKS

Claims 1 and 18 have been amended and no new claims have been canceled. Claim 29 was previously canceled. No new claims have been added. Accordingly claims 1-28 remain under prosecution in this application.

Original Claim 21

In preparing this response, the undersigned noted that original claim 21 was inadvertently omitted from the list of the claims involved in the appeal of this application. A review of the prosecution history of this application shows that claim 21 was originally submitted and has at no time been amended. Accordingly, the undersigned has included claim 21 (in exactly the same format as it occurred in the filing of this application) herewith.

35 USC § 112, First Paragraph

Claims 1 and 18 are rejected under 35 USC § 112, first paragraph as failing to comply with the written description requirement. Specifically, the Examiner has taken the position that in claims 1 and 18, "although the newly added description to Figure 1B in the specification states that there is 'no migration of the defect 100 toward surface 102', it does not explicitly state that the applied force 'is insufficient to cause the subsurface kissing unbond to migrate toward a specimen surface', as stated in claims 1 and 18." Although it is true that the language of claims 1 and 18 does not verbatim track the language found on page 4, first full paragraph, there is no requirement that a verbatim use of the specification terms be found in the claims. The undersigned believes that claims 1 and 18 do fully comply with the written description requirement. However, in order to move this case to allowance, the undersigned has changed the language of claims 1 and 18 to more closely track the specific language used in page 4, first full paragraph of the specification. In view of the amendments to claims 1 and 18, the undersigned is confident that the Examiner's rejection of claims 1 and 18 under 35 USC § 112, first paragraph, is now overcome.

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35 USC § 112, Second Paragraph

Claims 1-14, and 18-28 are rejected under 35 USC § 112, second paragraph, as being indefinite. Specifically, the Examiner believes that the claim language is confusing because, according to the specification "the application of tensile forces does not exacerbate the defect" while, according to claims 1 and 18, "the magnitude of the force is sufficient to exacerbate a thermal discontinuity" caused by the defect, as stated in claim 1, and, as stated in claim 18, the force "is sufficient to change at least one dimension of the subsurface kissing unbond defect". The undersigned does not believe that any of the claims are indefinite. The undersigned believes that the Examiner is confusing the act of "exacerbating the defect" with a totally separate concept of exacerbating a thermal discontinuity. According to the specification, page 4, first full paragraph, the reason that the claimed method and apparatus is "non-destructive" is that because the tensile forces applied by the present invention do not exacerbate the defect. Exacerbation of the defect is defined very specifically in page 4, first full paragraph in that it "does not leave the defect any worse after the test than it was before the test." Also, page 4, first full paragraph states that "there is no migration of defect 100 toward surface 102." The lack of migration of the defect toward the surface is a direct result of the fact that the tensile forces do not exacerbate the defect (i.e. they do not leave the defect any worse after the test than it was before the test). However, in order for the system of the present invention to effectively evaluate a specimen non-destructively, it must exacerbate a thermal discontinuity. A thermal discontinuity associated with a defect is an attribute of the defect but it is not the defect itself. How can a thermal discontinuity be exacerbated without exacerbating the defect itself? This balance is achieved by applying an external force to the specimen sufficient to disrupt the equilibrium around the kissing unbond defect 100 (thereby generating sufficient thermal contrast for the defect to be thermographically detectable) without introducing enough external force to cause the defect to migrate (i.e. cause the defect to be worse after the test than it was before the test).

In view of the above discussion, the undersigned does not believe that there is anything indefinite about the claim terms "sufficient to exacerbate a thermal discontinuity" and "wherein said force is insufficient to cause a subsurface kissing unbond to migrate toward a specimen surface."

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In view of the amendments and discussions set forth above, the undersigned believes that this case is now in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-3145, under Order No. 209529-81571 from which the undersigned is authorized to draw.

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Respectfully submitted,

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